

Work Order ID 115500

April-02-14 11:13:21 AM

115500

Page 1

Item ID: D3391-021 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fwd Tube Assembly
 Start Date: 4/02/14 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 4/16/14 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 14-04-02 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	I								
100		0.00							
100	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	Cut as per dwg.								
110		0.00							
110	BENDING MACHINE - SKIDTUBES								
CNC Bend 1	Memo	0.00							
CNC Delta 100 Bender	Bend as per Dwg D3391 Using Bend Prog 3391021								
120		0.00							
120	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.00							
Quality Control									

H-6.63

DAS
03
9-89

DP 14-4-15

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Item ID: D3391-021 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Fwd Tube Assembly
Start Date: 4/02/14 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 4/16/14 Req'd Qty: 1.00 *1* Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	HAAS CNC VERTICAL MACHINING #1	0.00				1	0		M4 14/05/07
130									
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine as per Folio FA590 Rev. <u>I</u> & Dwg D3391 Rev. <u>I</u> Identify as D3391-1 2-Debur								
140	QC2- Inspect parts off machine FAI/FAIB	0.00				1	0		M4 14/05/07
140									
QC	Memo	0.00							
Quality Control									
150	CONVENTIONAL MILLING MACHINE	0.00				1			14-5-28
150									
Mill Conv	Memo	0.00							
Conventional Milling Machine	Drill X1 Aft cap as per Dwg D3391 .1875" dia								

68-6
13
DAS

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Item ID: D3391-021 Accept *N900040100* Setup Start *NS1*

Revision ID: Stop *NS2*

Item Name: Fwd Tube Assembly

Start Date: 4/02/14 Start Qty: 1.00 *1*

Required Date: 4/16/14 Req'd Qty: 1.00 *1*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC2- Inspect parts off machine FAI/FAIB	0.00				1			14-5-28
160									
QC	Memo	0.00							
Quality Control									
170	QC8- Inspect parts - second check	0.00				1	φ		DAS 08 9-89
170									
QC	Memo	0.00							
Quality Control									

68-6
E1
S10

B.D 14/05/28

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Item ID: D3391-021

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Fwd Tube Assembly

Start Date: 4/02/14 Start Qty: 1.00

1

Cust Item ID:

Required Date: 4/16/14 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

0.00

180

Skidtubes

0.00

Skidtubes

Memo

1-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step

2-Drill float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size)
(ONLY DRILL HOLES MARKED "A")

3-Open tow cap holes to .208" as per Dwg D3391

4-Open Tow Ring hole to .640" as per Dwg D3391

5- open float bag holes 0.328" and counter sink as per dwg D3391

6-Deburr & Scribe Batch number Inside aft end.

7-Transfer drill D3391-021 with D3391-023

NO WEARPLATE HOLES ARE TRANSFER DRILLED
MID TUBE BATCH # 115503

14-6-31/4/15

14-8-11

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Accept

N.900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Fwd Tube Assembly

Start Date: 4/02/14 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 4/16/14 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code
---------	--------	-----------

Accept Qty

Reject
QtyReject
Number

**Insp.
Stamp**

190

QC5- Inspect part completeness to step on W/O

0.00

190

OC

Memo

0.00

Quality Control

200

Chemical Conversion Coat per QSI005 4.1

0.00

200

HandFinish

Memo

0.00

Hand Finishing

210

QC7-Inspect Chemical Conversion Coat

0.00

210

QC

Memo

0.00

Quality Control

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1 15500

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Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 4/02/14 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 4/16/14 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

220

0.00

220

Skidtubes

0.00

Skidtubes

Memo

1-instal spacers as per dwg D3391

A/R Magnabond 6398 batch:

exp. date: 14-12-30

cure time 12hrs. as per QSI015

2- grind crossbolt flush

3-back drill crossbolt if necessary

230

QC5- Inspect part completeness to step on W/O

0.00

230

0.00

QC

Memo

Quality Control

235

Pressure Wash per QSI005 4.3

0.00

235

0.00

HandFinish

Memo

Hand Finishing

AND REALODINE AS PER OSI 005

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 Required Date: 4/16/14 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 *240* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M128959</i> Memo START TIME: <i>2:45</i> OVEN TEMPERATURE: <i>320°</i> FINISH TIME: <i>3:15</i>	0.00 0.00				<i>1</i>	<i>0</i>	<i>14-9-9</i>	<i>DAS 34 9-89</i>
250 *250* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				<i>1x</i>	<i>d</i>	<i>ll</i>	<i>1409d11</i> <i>DAS 15 9-89</i>
254 *254* HandFinish Hand Finishing	Assemble as per dwg Memo	0.00 0.00				<i>1x</i>	<i>d</i>	<i>ll</i>	<i>1409d12</i>

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Item ID: D3391-021 Accept *N900040100* Setup Start *NS1*
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 Start Date: 4/02/14 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 4/16/14 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
256	QC5- Inspect part completeness to step on W/O	0.00							DA 38 9-89
256									14-9-16
QC	Memo	0.00							
Quality Control									
260	Identify as per dwg & Stock Location: <u>w/o</u>	0.00							
260									
Packaging	Memo	0.00							
Packaging									
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.00							
Quality Control									

14/9/17
 ME
 14-9-16

Picklist Print

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Work Order ID: 115500

115500

Parent Item: D3391-021

D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 4/02/14

Required Date: 4/16/14

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP A05.09.13New issue KJ/JLM
 IPP B06.02.10Dwg rev.D ecn 773 EC
 IPP C06.05.02Added inspections EC
 IPP D 07.03.13 rev F dwg EC
 IPP E 07.11.07 revG dwg ecn1053P EC verified by: DD
 IPP Rev:f ECN 1056 07-11-12 DD verified by: EC
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC
 IPP Rev I 09.02.02 added hardware EC verified by: DD IPP Rev:J
 11.11.14 AS PER REV.I DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4095-051		Manufactured	No				Each	9.0000		1			
D4095-051									**				
Wearpad Assembly													

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	9	
108291	9	

D6013-047		Manufactured	No			100	Each	166.0000	1	1			
D6013-047									**				
Skidtube Material													

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG003	166	
72505	42	
86064	124	

B118896 (1x) 24 14/04/14

02/14/04/14

①

Picklist Print

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Work Order ID: 115500

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Parent Item: D3391-021

D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 4/02/14

Required Date: 4/16/14

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured No

220

Each

300.0000

4

4

D3670-4-200

Bushing

**

Location

Loc Qty

Loc Code

FG

10

87709

10

LG001

290

103880

39

109108

242

96240

9

D3401-041

Manufactured No

Each

30.0000

1

D3401-041

Tow Cap Assembly

**

Location

Loc Qty

Loc Code

FP001

30

103868

5

109127

9

92680

1

94116

4

94303

11

DD 14-8-18

4

all 109111

xc

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1 15500

D3391-021

Required Date: 4/16/14

Required Qty: 1.00

10

2

all good !!

Loc Code

200

10

22 14/09/11

Loc Code

A horizontal line with three points labeled a , b , and c from left to right.

11129520

110

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Picklist Print

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Work Order ID: 115500

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Parent Item: D3391-021

D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 4/02/14

Required Date: 4/16/14

Start Qty: 1.00

Required Qty: 1.00

D3672-1

Manufactured No

Each

1,420.000

4

D3672-1

Phenolic Washer

all done

Location

Loc Qty

Loc Code

FG

10

85222

10

ST060

1410

103845

4

112218

500

113581

500

93886

224

99099

182

X4

AELS-1032-225

AELS8-1032-225 Purchased

No

Each

400.0000

10

AFI S-1032-225 *YALS-7-1032-225*

Insert

all done

Location

Loc Qty

Loc Code

ST280

400

m128179

400

11128649

Y10

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Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

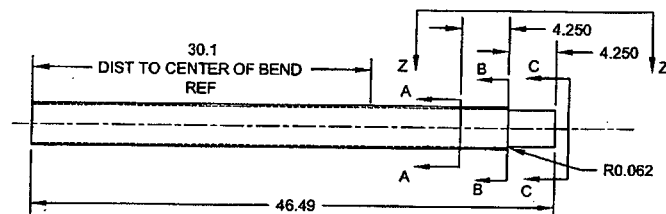
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

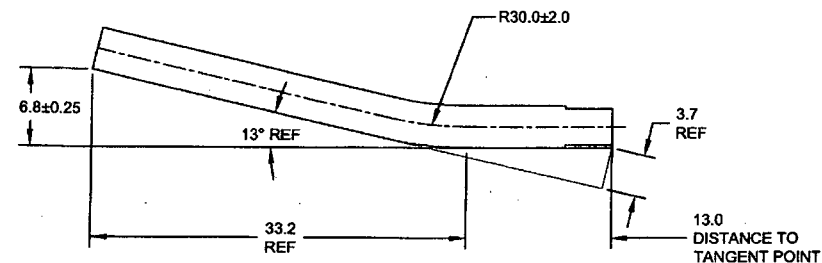
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

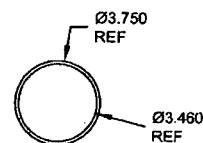
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____
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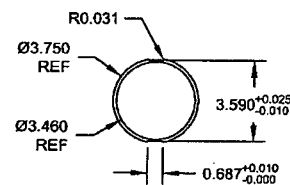
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



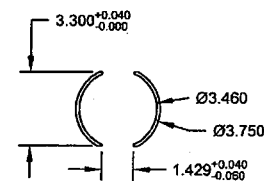
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



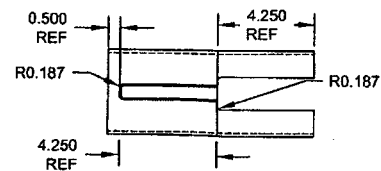
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
SCALE 2X



VIEW Z-Z
SCALE 2X

115500 MJC
14-0402

RELEASED
2011-11-04

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO. D3391	REV. 1
MFG. APPR.		SHEET 3 OF 8	
APPROVED		TITLE SCALE	
DE APPR.		412 FLOAT SKIDTUBE NTS	
DATE	11.10.13	<small>COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

